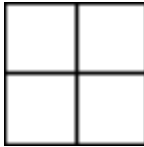


Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

Allele	Trait
T	Tall
t	Short
S	Smooth peas
s	Wrinkled peas
P	Purple flowers
p	White flowers

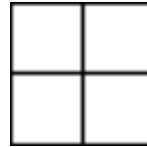
### INDEPENDENT PRACTICE: PUNNETT SQUARES

Complete the Punnett squares for each question, then use the table to the right to answer the questions:



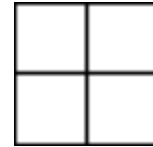
1. A plant which is homozygous for smooth peas is crossed with a plant that is heterozygous for pea shape. What percentage of offspring will have smooth peas?

\_\_\_\_\_



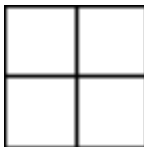
2. A plant which is homozygous short is crossed with a plant that is homozygous tall. What percentage of plants will have a heterozygous genotype?

\_\_\_\_\_



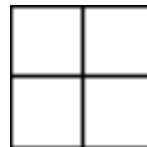
3. Two plants which are heterozygous for height are crossed. What will be the ratio of tall plants to short plants in the offspring?

\_\_\_\_\_



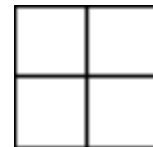
4.  $Ss$  (♂) x  $Ss$  (♀)  
What percentage of offspring will have wrinkled peas?

\_\_\_\_\_



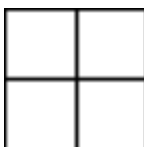
5.  $Tt$  (♂) x  $tt$  (♀)  
What percentage of offspring will be short?

\_\_\_\_\_



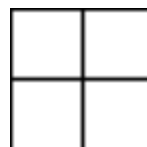
6.  $PP$  (♂) x  $Pp$  (♀)  
What percentage of offspring will have white flowers?

\_\_\_\_\_



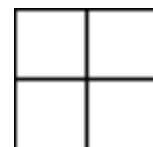
7. A plant which is homozygous for wrinkled peas is crossed with a plant that is homozygous for smooth peas. What percentage of offspring will have wrinkled peas?

\_\_\_\_\_



8. A plant which is heterozygous for flower color is crossed with a plant that is homozygous for white flowers. What will be the ratio of purple flowers to white flowers?

\_\_\_\_\_

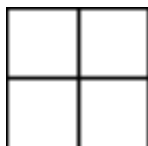


9. A plant which is heterozygous for height is crossed with a plant that has a short phenotype. What percentage of plants will be tall?

\_\_\_\_\_

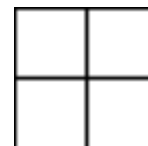
Use this information for the questions on this page.

Allele	Trait
F	Solid gray fur
f	Spotted fur
B	Brown eyes
b	Blue eyes
T	Long tail
t	Short tails



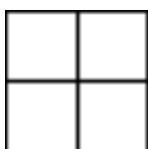
10.  $Ff (\text{♂}) \times ff (\text{♀})$   
 What percentage of offspring will have spotted fur?

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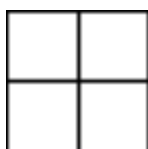
11.  $bb (\text{♂}) \times Bb (\text{♀})$   
 What will be the ratio of brown eyes to blue eyes?

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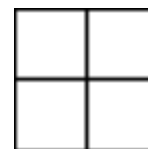
12. An animal which is homozygous for short tails is crossed with an animal that is heterozygous for tail length. What percentage of offspring will have long tails?

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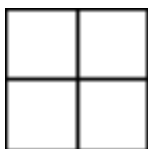
13. An animal which is homozygous for brown eyes is crossed with an animal that is homozygous for blue eyes. What percentage of animals will have blue eyes?

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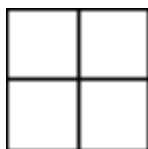
14. Two animals which are heterozygous for fur pattern are mated. What will be the ratio of solid gray fur to spotted fur in the offspring?

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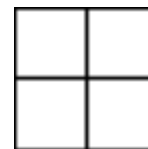
15.  $Ff (\text{♂}) \times Ff (\text{♀})$   
 What percentage of offspring will have spotted fur?

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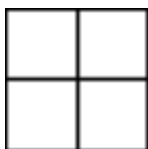
16.  $Bb (\text{♂}) \times bb (\text{♀})$   
 What percentage of offspring will have blue eyes?

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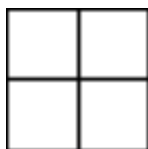
17.  $Tt (\text{♂}) \times Tt (\text{♀})$   
 What will be the ratio of long tails to short tails in the offspring?

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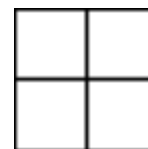
18. An animal that has spotted fur is crossed with an animal that is homozygous for solid gray fur. What percentage of offspring will have spotted fur?

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19. An animal which is heterozygous for eye color is crossed with an animal that is homozygous for blue eyes. What will be the ratio of brown eyes to blue eyes in the offspring?

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20. An animal which is heterozygous for tail length is crossed with an animal that has a short tail. What percentage of offspring will have short tails?

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